



AF/2644  
\$

PATENT  
Attorney Docket No.: HELLO-00308

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: ) Group Art Unit: 2644  
Bruce W. Stelman ) Examiner: Jefferey F. Harold  
Serial No.: 09/286,249 ) **TRANSMITTAL LETTER**  
Filed: April 5, 1999 ) 162 North Wolfe Road  
For: **SMART INTERFACE** ) Sunnyvale, California 94086  
**TECHNOLOGY** ) (408) 530-9700  
Customer Number 28960

**RECEIVED**

JUL 15 2004

Technology Center 2600

Mail Stop Appeal Briefs - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Enclosed please find an Appeal Brief in triplicate for filing with the U.S. Patent and Trademark Office. Also attached is a request for one month extension of time and a check in the amount of \$440.00 to cover the \$110.00 extension of time fee plus \$330.00 appeal brief filing fee.

The Commissioner is authorized to charge any additional fee or credit any overpayment to our Deposit Account No. 08-1275. **An originally executed duplicate of this transmittal is enclosed for this purpose.**

Respectfully submitted,  
HAVERSTOCK & OWENS LLP

Dated: July 9, 2004

By: Thomas B. Haverstock  
Thomas B. Haverstock  
Reg. No.: 32,571

Attorneys for Applicant

CERTIFICATE OF MAILING (37 CFR § 1.8(a))

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the U.S. Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to the: Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450

HAVERSTOCK & OWENS LLP.  
Date: 7/9/04 By: [Signature]

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Bruce W. Stelman

Serial No.: 09/286,249

Filed: April 5, 1999

For: **SMART INTERFACE  
TECHNOLOGY**

Group Art Unit: 2644

Examiner: Jefferey F. Harold

162 North Wolfe Road  
Sunnyvale, CA 94086  
(408) 530-9700  
Customer Number:28960

Mail Stop Appeal Briefs - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

RECEIVED

JUL 15 2004

Technology Center 2600

**APPELLANT'S BRIEF (37 C.F.R. § 1.192)**

The following comprises Appellant's Brief from the final rejection of claims 41-58 and 63 in this Application. The final rejection was issued March 10, 2004. This brief is also in furtherance of the Notice of Appeal, filed concurrently with the Appellant's Brief in this case.

The fees required under 37 C.F.R. §1.17, and any required petition for extension of time for filing this brief and fees therefor, are dealt with in the accompanying TRANSMITTAL OF APPELLANT'S BRIEF.

This brief is transmitted in triplicate. (37 C.F.R. § 1.192(a))

The brief contains these items under the following headings, and in the order set forth below (37 C.F.R. §1.192(c)):

- I. STATEMENT OF REAL PARTY IN INTEREST
- II. RELATED APPEALS AND INTERFERENCES
- III. STATUS OF CLAIMS
- IV. STATUS OF AMENDMENTS
- V. SUMMARY OF INVENTION
- VI. ISSUES ON APPEAL
- VII. GROUPING OF CLAIMS
- VIII. ARGUMENTS – Rejections Under 35 U.S.C. § 112, First Paragraph
- IX. APPENDIX
  - A. CLAIMS ON APPEAL
  - B. PATENT CITED IN APPELLANT’S BRIEF

**RECEIVED**

JUL 15 2004

Technology Center 2600

The final page of this brief bears the practitioner’s signature.

**I. REAL PARTY IN INTEREST (37 C.F.R. § 1.192(c)(1))**

The real party in interest in this appeal is Hello Direct, Inc. of San Jose, California. Hello Direct, Inc. is the assignee of the above-identified application. This assignment was recorded on 07/28/1997, on reel number 8678 and frame number 0110. Hello Direct, Inc. is now a wholly owned subsidiary of GN Netcom of Ballerup, Denmark.

**II. RELATED APPEALS AND INTERFERENCES (37 C.F.R. § 1.192(c)(2))**

There are no appeals or interferences that will directly affect, or be directly affected by, or have a bearing on the Board's decision in this appeal.

**III. STATUS OF CLAIMS (37 C.F.R. § 1.192(c)(3))**

**A. TOTAL NUMBER OF CLAIMS IN APPLICATION**

Claims in the application are Claims 1-63.

**B. STATUS OF ALL CLAIMS**

1. Claims cancelled: Claims 1-40 and Claims 59-62.
2. Claims withdrawn from consideration but not cancelled: NONE.
3. Claims pending: Claims 41-58 and 63.
4. Claims allowed: NONE.
5. Claims rejected: Claims 41-58 and 63.

**C. CLAIMS ON APPEAL**

The claims on appeal are: Claims 41-58 and 63. Claims 41-58 and 63 are rejected under 35 U.S.C. §112, first paragraph. The text of the claims on appeal are provided in Appendix A.

**IV. STATUS OF AMENDMENTS (37 C.F.R. § 1.192(c)(4))**

No amendments have been filed subsequent to issuance of the final rejection.

**V. SUMMARY OF INVENTION (37 C.F.R. § 1.192(c)(5))**

As stated in the Summary of the Invention in the above-identified application, at page 2, lines 12-22,

The present invention overcomes interface problems between proprietary handset ports on telephone base units and voice/data accessory products by allowing a user to automatically calibrate the telephone accessory product for an optimal interface match with the intended telephone base unit. This is accomplished through the use of a "Smart Interface Technology" (SIT) integrated chip set consisting of a full custom analog and semi-custom digital integrated circuit. The SIT incorporates three different methods for "learning" the characteristics of 4-wire port modular interfaces found in most telephone station sets. These methods determine the appropriate 4-wire terminal configurations, the transmit and receive channels of the intended telephone base unit, and adjust the channel sensitivities until an optimal and clear signal is provided for the user.

**VI. ISSUES (37 C.F.R. § 1.192(c)(6))**

Appellant's appeal of the final rejection of Claims 41-58 and 63 raises the following issue:

Whether the Examiner erred in rejecting Claims 41-58 and 63 under 35 U.S.C. § 112, first paragraph, for written description.

**VII. GROUPING OF CLAIMS (37 C.F.R. § 1.192(c)(7))**

For purposes of this appeal only, Claims 41-58 and 63 stand or fall together as they share a common ground of rejection.

VIII. ARGUMENTS–REJECTIONS UNDER 35 U.S.C. §112, FIRST PARAGRAPH (37  
C.F.R. § 1.192(c)(8)(i))

A. Brief Background of File History

The pending U.S. Patent Application Serial No. 09/286,249 (the '249 patent application) is a continuation of a U.S. Patent Application Serial Number 08/625,398. U.S. Patent Application Serial Number 08/625,398 resulted in three patents being issued in related cases. First, the parent patent, U.S. Patent No. 5,892,823, was issued on April 6, 1999. Second, a divisional patent, U.S. Patent No. 5,937,031, was issued August 10, 1999. Third, U.S. Patent No. 6,343,126 was issued on January 29, 2002 as a result of a continuation-in-part application of U.S. Patent Application Serial Number 08/625,398.

In the present application, the '249 patent application, a Request Under 37 C.F.R. § 1.607 for Interference With Patent was filed on April 6, 1999. The '249 patent application includes pending Claims 41-58 and 63, which were added by preliminary amendment on April 5, 1999. Claims 41-58 and 63, the claims on appeal, also correspond to claims found in U.S. Patent No. 5,729,603 issued March 17, 1998. A copy of U.S. Patent No. 5,729,603 is attached to this brief. Claims 41-58 and 63 were copied from U.S. Patent No. 5,729,603 for the purposes of provoking an interference.

During the prosecution of the present application, in an Office Action mailed November 8, 1999, Examiner Saint-Surin **allowed** all the pending claims (namely, Claims 41-58 and 63), but suspended *ex parte* prosecution due to a potential interference for a period of 6 months from the date of the Office Action. In an Office Action mailed April 11, 2003 Examiner Jefferey Harold rejected Claims 41-58 and 63, the same claims which Examiner Saint-Surin had **previously allowed over three years ago**, on the basis of 35 U.S.C. § 112, first paragraph. In a final Office Action mailed March 10, 2004, Examiner Harold maintained his § 112, first paragraph rejection as to Claims 41-58 and 63.

B. Examiner's Rationale for Rejection under 35 U.S.C. §112, first paragraph

Examiner Harold set forth his § 112, first paragraph rejection on all pending claims in the Final Office Action mailed March 10, 2004 and in an Advisory Action mailed June 16, 2004.

Notably, in the Final Office Action, the Examiner stated that as to claims 41-58 and 63,

... [t]he examiner does not consider this claim to be directed to the same invention as that of U.S. Patent No. 5,729,603 because **the support for the copied claims is not the same as that of U.S. Patent No. 5,729,603.**

Accordingly, an interference cannot be initiated based upon this claim. The specific differences are discussed below.

Regarding claim 41, the claim limitation recites "...a switch matrix, settable to any of a plurality of switch configurations...". U.S. Patent No. 5,729,603 discloses that the plurality of switch configuration is specifically 6 configurations as disclosed at column 4, line 32 through column 5, line 24 and exhibited in table. Conversely applicant's specification does not disclose the number of possible configuration, thus the support for the claimed limitation is different. The claim further cites limitation "...a control logic, coupled to the switch matrix, that automatically determines which of the plurality of signal lines from the handset port comprise the handset port receive path, determines a preferred switch configuration from among a plurality of switch configurations based upon which of the plurality of switch lines from the handset port comprise the handset port receive path, and sets the switch matrix to the preferred switch configuration, the preferred switch configuration coupling the handset port path to the handset receive path." U.S. Patent No. 5,729,603 discloses that control logic test each of the six configurations is tested with a test signal, typically a dial tone and the result is measured via the signal level detector to determine the preferred configuration. Each of the six combinations are tested sequentially and the result is compared to the previous result and the best result is used as the combination. Conversely the applicants' specification does not disclose the above process to determine the appropriate configuration. Therefore claim 41 fails to meet the requirement of MPEP 2307.02.

(Office Action mailed March 10, 2004, pages 2-3, emphasis added).

Then, as to claims 56, 57 and 63, the Examiner noted that these claims disclose the same limitations found in claim 41 (Office Action mailed March 10, 2004, page 3). Thus, the Examiner's position is that the applicant's specification fails to provide the support to copy the claim limitations stated above. (Office Action mailed March 10, 2004, page 3). The Examiner further emphasized in his Advisory Action mailed June 16, 2004 that he views his § 112 rejection is "correct in that the [applicant's] specification does not support the copied claims." (Advisory Action, page 2).

C. Legal Standard for Written Description Requirement of 35 U.S.C. § 112, First Paragraph

To determine if an applicant has complied with the written description requirement as mandated in 35 U.S.C. § 112, first paragraph, the test is whether the disclosure of an application as originally filed reasonably conveys to one skilled in the art that the inventor had possession at the time of the claimed subject matter. Vas-Cath, Inc. v. Mahurkar, 935 F.2d 1555, 1563-64, 19 USPQ2d 1111, 1116-17 (Fed. Cir. 1991). In Vas-Cath, the reviewing court noted that written description and enablement requirements are separate requirements under 35 U.S.C. § 112, first paragraph. 935 F.2d at 1560, 19 USPQ2d at 1114. The terminology “lack of support” has also been held to imply a reliance on the written description requirement of 35 U.S.C. § 112. In re Higbee and Jasper, 527 F.2d 1405, 1406, 188 USPQ 488, 489 (CCPA 1976).

Notably, the test for adequate written description for a claim element does not require the recitation of that element *in ipsius verbis* [i.e., “in the same words”] in the specification to satisfy the description requirement of § 112. In re Wertheim, 541 F.2d 257, 262, 191 USPQ 90, 96 (CCPA 1976). According to MPEP § 2163.05, a “claim limitation may be **expressly, implicitly or inherently** supported in the originally filed disclosure.” (emphasis added) Also, under certain circumstances, the written description requirement may be met by original drawings alone. Vas-Cath, Inc., 935 F.2d at 1563, 19 USPQ2d at 1117; In re Wolfensperger, 302 F.2d 950, 956, 133 USPQ 537, 542 (CCPA 1962). Furthermore, for a § 112 rejection, the Examiner bears the initial burden to present why one skilled in the art “would not recognize in the [applicant’s] disclosure a description of the invention defined by the claims.” In re Wertheim, 541 F.2d 257, 263, 191 USPQ 90, 96-98 (CCPA 1976).



D. Appellant's Position

1. Examiner erred in rejecting the claims on appeal under 35 U.S.C. § 112, first paragraph, on the basis that the Examiner improperly read limitations into the claims from a specification.

Examiner Harold rejected Claims 41-58 and 63 under 35 U.S.C. § 112, first paragraph, based on the written description requirement. Examiner Harold correctly noted that Claims 41-58 and 63 are claims which the appellant believes correspond to claims of U.S. Patent No. 5,729,603. Appellant copied these claims from U.S. Patent 5,729,603 for purposes of provoking an interference.

However, the Examiner erred in his analysis of the written description requirement under § 112, first paragraph. Specifically, the Examiner noted that he did not consider the claims on appeal **“to be directed to the same invention as that of U.S. Patent 5,729,603 because the support for the copied claims is not the same as that of U.S. Patent 5,729,603.”** (Office Action mailed March 10, 2004, page 2) (emphasis added). The Examiner pointed out two specific claim limitations in Claim 41 as the basis of his rejection of all the claims on appeal.

a. First Claim Limitation in Claim 41 as Basis of Examiner's Rejection

First, claim 41 has a limitation for “...a switch matrix settable to any of a plurality of switch configurations...”. Examiner Harold stated that U.S. Patent No. 5,729,603 discloses that the “plurality of switch configuration [sic] is specifically 6 configurations,” and the Examiner further alleged that the appellant's specification does not disclose the number of possible configurations. Hence, the Examiner concluded that “the support for the claimed limitation is different.” (Office Action mailed March 10, 2004, pages 2-3).

The Examiner was incorrect in his analysis of Claim 41. Under 35 U.S.C. § 112, first paragraph, the test is whether the disclosure of an application as originally filed reasonably

conveys to one skilled in the art that the inventor had possession at the time of the claimed subject matter. Vas-Cath, Inc. v. Mahurkar, 935 F.2d 1555, 1563-64, 19 USPQ2d 1111, 1116-17. To do this, one must determine the scope of the claim in question. “Analysis begins with a key legal question – **what** is the invention **claimed**? . . . Claim interpretation . . . will normally control the remainder of the decisional process.” Panduit Corp. v. Dennison Mfg. Co., 810 F.2d 1561, 1567-68, 1 USPQ2d 1593, 1597 (Fed. Cir. 1987), cert. denied, 481 U.S. 1052 (1987). More importantly, **claims will be given their broadest reasonable interpretation consistent with the specification, and limitations appearing in the specification are not to be read into the claims.** In re Etter, 756 F.2d 852, 858, 225 USPQ 1, 5 (Fed. Cir. 1985) (emphasis added).

Furthermore, the Examiner failed to meet his initial burden of proof required to make a proper rejection under 35 U.S.C. § 112, first paragraph. The Examiner has the initial burden of presenting evidence or reasons why one skilled in the art would not recognize in an applicant’s disclosure a description of the invention defined by the claims. In re Wertheim, 541 F.2d 257, 265, 191 USPQ 90, 98 (CCPA 1976); Ex parte Sorenson, 3 USPQ2d 1462, 1463 (Bd. Pat. App. & Int. 1987). The Examiner’s final rejection showed that he misapplied 35 U.S.C. § 112, first paragraph in analyzing the claims on appeal. Specifically, as to claim 41, the Examiner read claim limitations from a patentee’s specification of U.S. Patent No. 5,729,603 into Claim 41, despite case law precedent that limitations appearing in the specification are not to be read into the claims. In re Etter, 756 F.2d 852, 225 USPQ 1 (Fed. Cir. 1985). The Examiner improperly used those improper limitations in the specification of U.S. Patent No. 5,729,603 as a means of meeting his initial burden of proof.

The Examiner should have instead looked to the specification of the **appellant** to determine if the disclosure of the appellant’s application as originally filed reasonably conveys to one skilled in the art that the inventor had possession at the time of the claimed subject matter. Vas-Cath, Inc. v. Mahurkar, 935 F.2d 1555, 1563-64, 19 USPQ2d 1111, 1116-17 (Fed. Cir. 1991). This analysis corresponds to the requirements of 35 U.S.C. § 112, first paragraph for a

determination of whether the disclosure relied on constitutes a “full, clear, concise and exact description . . . of the invention claimed.” Although the Examiner conceded in the Advisory Action mailed June 16, 2004, that the “disclosure relied on” is the specification of the appellant (i.e. the copier), the Examiner maintained that the “specification does not support the copied claims.” (Advisory Action, page 2).

In essence, the Examiner erroneously took the specification of U.S. Patent No. 5,729,603 and read from that specification that the “plurality of switch configurations” must be 6, as disclosed in U.S. Patent No. 5,729,603 (Office Action, mailed April 11, 2003, page 2). Thus, the Examiner read a claim limitation of 6 switch configurations into Claim 41, despite the fact that Claim 41 clearly states “a plurality of switch configurations.” The Examiner’s analysis is contrary to the holding of In re Etter, 756 F.2d 852, 858 (limitations appearing in the specification are not to be read into the claims).

Furthermore, the Examiner failed to recognize **the specification “need not describe the claimed subject matter in exactly the same terms as used in the claims;** it must simply indicate to persons skilled in the art that as of the [filing] date the applicant had invented what is now claimed.” Eiselstein v. Frank, 52 F.3d 1035, 1038, 34 USPQ2d 1467, 1470 (Fed. Cir. 1995) (citing Vas-Cath, 935 F.2d at 1562, 19 USPQ2d at 1115, and In re Wertheim, 541 F.2d 257, 265, 191 USPQ 90, 98 (CCPA 1976)) (emphasis added). Also, claims are not limited to embodiments disclosed in the specification. Rexnord Corp. v. Laitram Corp., 274 F.3d 1336, 1344, 60 USPQ2d 1851, 1856 (Fed. Cir. 2001) (“[A]n applicant is not required to describe in the specification every conceivable and possible future embodiment of his invention.”)

It is well-settled that the terms in appealed claims must be given their ordinary meaning unless another meaning is intended by the inventors. In re Morris, 127 F.3d 1048, 1055-56, 44 USPQ2d 1023, 1029. “Without an express intent to impart a novel meaning to claim terms, an inventor’s claim terms take on their ordinary meaning.” York Prods., Inc. v. Cent. Tractor Farm & Family Ctr., 99 F.2d 1568, 1572, 40 USPQ2d 1619, 1622 (Fed. Cir. 1996). In the present

case, the Examiner should have analyzed Claim 41 and considered the ordinary meaning the phrase “plurality of switch configurations” found in the limitation “...a switch matrix settable to any of a plurality of switch configurations...”.

The Examiner erred in reading claim limitations from the patentee’s specification of U.S. Patent No. 5,729,603, to conclude that a “plurality of switch configurations” means that there must be 6 switch configurations. **Although the appellant maintains that the Examiner should not have read limitations from the specification of U.S. Patent No. 5,729,603 into Claim 41, even the specification of U.S. Patent No. 5,729,603 does not support the Examiner’s position that “a plurality of switch configurations” means 6 switch configurations.** On the contrary, the specification of U.S. Patent No. 5,729,603 states that “[t]he switch matrix may be set to one of many switch configurations. . .”, with no indication that the switch configurations should be limited to 6 configurations. (U.S. Patent No. 5,729,603, Summary of the Invention, column 2, lines 28-29)(emphasis added). Furthermore, there is no express intent to impart a novel meaning to the term “plurality” in the phrase “plurality of switch configurations” of Claim 41. Also, when used in a claim, the ordinary meaning of the term “plurality” is “more than one” or “at least two”. York Prods., Inc. v. Cent. Tractor Farm & Family Ctr., 99 F.2d 1568, 1575 (Fed. Cir. 1996)(“The term means, simply, ‘the state of being plural.’”). In this case, the ordinary meaning of “a plurality of switch configurations” is “more than one” switch configurations, not 6 switch configurations, as the Examiner asserts in his final rejection.

The Examiner further failed to recognize that he should have followed the analysis as set forth in MPEP 2301.01 Preliminaries to an Interference, which states in part:

In determining whether an interference is necessary, **a claim should be given the broadest interpretation which it reasonably will support**, bearing in mind the following general principles:

...  
(B) Express limitations in the claim should not be ignored **nor should limitations be read therein...**

(emphasis added) Thus, applying the principles of MPEP 2301.01, the broadest interpretation of

“a plurality of switch configurations” that the claim will support is that of “more than one switch configuration.” Hence, Claim 41's claim limitation of “...a switch matrix settable to any of a plurality of switch configurations...” should be interpreted to mean “...a switch matrix settable to any of more than one switch configurations...” That being the case, the appellant's specification clearly supports “...a switch matrix settable to any of a plurality of switch configurations...”

In the '249 patent application, a switch array is shown in Figs. 4 and 8-9 of the disclosure, having four input ports which are coupled to a four line telephone base jack. ('249 patent application, page 13, lines 13-15). The switch array 2 is manipulated by sequentially coupling pairs of line input ports until a CO dialtone is sensed by the digital MCU 100 in the receive channel. ('249 patent application, page 13, lines 19-27). Regarding the language of Claim 41 which recites a “plurality of switch configurations,” the '249 patent application states that:

The digital MCU 100 is able to address and manipulate the 32 bit addressable latch 1, thereby controlling the 4x4 crosspoint switch array 2 and 100 ohm resistor shunt array 3, within the analog integrated circuit 200. The crosspoint switch array 2 has four input ports which are directly coupled to a four line telephone base unit jack 202 through the array 3, as illustrated by the lines 1-4. The 100 ohm resistor shunt array 3 contains six switchable shunt resistors, is configured in parallel with the crosspoint switch array 2 input ports, and is capable of providing a 100 ohm shunt resistance between any of the 4 line inputs.

When a telephone accessory including the interface system of the present invention is first plugged into a telephone base unit, the accessory may not operate because it has not yet been optimally configured to electronically communicate with the telephone base unit. A Central Office dialtone is applied by the telephone base unit to two of the lines of the jack 202. Under control of the digital MCU 100, the addressable latch 1 manipulates the crosspoint array 2 and the shunt select array 3 by sequentially coupling pairs of line input ports until a CO dialtone is sensed by the digital MCU 100 in the receive channel. This information is then latched for further analysis by the digital MCU 100.

('249 patent application, page 13, lines 10-27). One skilled in the art would recognize that the written disclosure of the '249 patent application as quoted above adequately supports the term “a plurality” in the claim limitation “a plurality of switch configurations” in Claim 41.

Furthermore, the '249 patent application discloses that once the receive lines are determined, the transmit lines are determined. Based upon the selected receive lines, certain transmit line

configurations are highly probable and are prioritized by algorithms. ('249 patent application, page 15, lines 24-27). One skilled in the art would recognize the written specification of the '249 patent application supports the limitation of "a plurality of switch configurations" in Claim 41.

Finally, it is well-settled that "when a claim is copied from another patent for interference purposes, it must be supported by the specification of the copier. . . it becomes irrelevant whether the specific text of the claim was copied from the interfering patent." Cultor Corp. v. A.E. Staley Manufacturing Co., 224 F.3d 1328, 1332 (Fed. Cir. 2000). "The specification that is relevant to claim construction is the specification of the patent in which the claims reside." Young Dental Mfg. Co. v. Q3 Special Prods., Inc., 112 F.3d 1137, 1143, 42 USPQ2d 1589, 1894 (Fed. Cir. 1997).

Although the Examiner conceded in his Advisory Action that "the disclosure relied on" as used in 35 U.S.C. § 112, first paragraph refers to the specification of the copier (appellant), he maintained that the specification does not support the copied claims, even though it is clear from reading the Office Action mailed March 10, 2004 that in fact, the Examiner referred to the specification of U.S. Patent No. 5,729,603 to read further limitations into the copied claims. The only tangible reason why one would refer to specification of the patentee would be if a claim is ambiguous. MPEP 2301.01 states that "[a] claim copied from a patent, if ambiguous, should be interpreted in the light of the patent in which it originated for purposes of determining whether a party has a right to copy a claim." However, there is no ambiguity in the term "plurality" used in the claim limitation "...a switch matrix settable to any of a plurality of switch configurations..." that would require one to interpret the phrase "plurality of switch configurations" to mean 6 switch configurations, nor, as mentioned previously, is there any express intent to impart a novel meaning to the phrase "plurality of switch configurations." Through his final rejection, the Examiner attempted to limit Claim 41 to "6 switch configurations" which is not what has been claimed.

Under MPEP 2301.01, claims should be given the broadest interpretation which it

reasonably will support. One skilled in the art would recognize that “a plurality of switch configurations” can mean “more than one switch configuration.” One skilled in the art would further recognize that the written disclosure of the ‘249 patent application specification adequately supports the term “a plurality” in the claim limitation “a plurality of switch configurations” in Claim 41.

b. Second Claim Limitation in Claim 41 as Basis of Examiner’s Rejection

The second claim limitation in Claim 41 cited in the Examiner’s final rejection is “...a control logic, coupled to the switch matrix, that automatically determines which of the plurality of signal lines from the handset port comprise the handset port receive path, determines a preferred switch configuration from among a plurality of switch configurations based upon which of the plurality of signal lines from the handset port comprise the handset port receive path, and sets the switch matrix to the preferred switch configuration, the preferred switch configuration coupling the handset port receive path to the headset receive path.” The Examiner’s rationale for the second claim limitation was:

U.S. Patent No. 5,729,603 discloses that control logic test each of the six configurations is tested with a test signal, typically a dial tone and the result is measured via the signal level detector to determine the preferred configuration. Each of the six combinations are tested sequentially and the result is compared to the previous result and the best result is used as the combination. Conversely the applicant’s specification does not disclose the above process to determine the appropriate configuration. Therefore claim 41 fails to meet the requirement of MPEP 2307.02.

(Office Action mailed March 10, 2004, pages 2-3). The Examiner in this case has again erroneously read limitations from a specification into Claim 41, using the disclosure of U.S. Patent No. 5,729,603. In doing so, the Examiner failed to meet his initial burden of proof required to make a proper rejection under 35 U.S.C. § 112, first paragraph. The Examiner bears the initial burden of presenting evidence or reasons why one skilled in the art would not recognize in an applicant’s disclosure a description of the invention defined by the claims. In re

Wertheim, 541 F.2d 257, 265, 191 USPQ 90, 98 (CCPA 1976); Ex parte Sorenson, 3 USPQ2d 1462, 1463 (Bd. Pat. App. & Int. 1987). The Examiner erroneously read limitations from a patentee's specification of U.S. Patent No. 5,729,603 into Claim 41, despite case law precedent that limitations appearing in the specification are not to be read into the claims. In re Etter, 756 F.2d 852, 225 USPQ 1 (Fed. Cir. 1985). The Examiner improperly used those limitations in the specification as an attempt to meet his initial burden of proof to make a § 112, first paragraph rejection.

As discussed in the previous section, MPEP 2301.01 states that a claim should be given the broadest interpretation which it reasonably will support. Also MPEP 2301.01 reads that "express limitations in a claim should not be ignored nor should limitations be read therein." Guidelines for Examination of Patent Applications Under the 35 U.S.C. 12, ¶1, "Written Description Requirement" emphasize that "[l]imitations may not. . . be imported into the claims from the specification." (Federal Register, Vol 66, No. 4, 1/5/2001, page 1105). "The description need not be in *ipsis verbis* [i.e., "in the same words"] to be sufficient." Martin v. Johnson, 454 F.2d 746, 751, 172 USPQ 391, 395 (CCPA 1972); also see Vas-Cath, 935 F.2d at 1563, 19 USPQ 2d at 1116.

Furthermore, as discussed in the last section, terms in claims should be read using their ordinary meaning, unless there is an express intent to impart a novel meaning to claim terms. York Prods., Inc. v. Cent. Tractor Farm & Family Ctr., 99 F.2d 1568, 1572, 40 USPQ2d 1619, 1622 (Fed. Cir. 1996). There is no express intent to impart a novel meaning to claim terms used in the limitations cited by the Examiner.

Appellant respectfully submits that by using the ordinary meaning of the terms found in the claim limitation, one skilled in the art would recognize that the inventor of the '249 patent application had possession of the time of the claimed subject matter. Notably, in the '249 patent application, under control of the digital MCU 100 (Fig. 7), the addressable latch 1 (Fig. 8) manipulates the switch array 2 by sequentially coupling pairs of line input ports until a CO



dialtone is sensed by the digital MCU 100 in the receive channel. ('249 patent application, page 13, lines 19-27). Specifically, the present specification states:

The digital MCU 100 is able to address and manipulate the 32 bit addressable latch 1, thereby controlling the 4x4 crosspoint switch array 2 and 100 ohm resistor shunt array 3, within the analog integrated circuit 200. The crosspoint switch array 2 has four input ports which are directly coupled to a four line telephone base unit jack 202 through the array 3, as illustrated by the lines 1-4. The 100 ohm resistor shunt array 3 contains six switchable shunt resistors, is configured in parallel with the crosspoint switch array 2 input ports, and is capable of providing a 100 ohm shunt resistance between any of the 4 line inputs.

When a telephone accessory including the interface system of the present invention is first plugged into a telephone base unit, the accessory may not operate because it has not yet been optimally configured to electronically communicate with the telephone base unit. A Central Office dialtone is applied by the telephone base unit to two of the lines of the jack 202. **Under control of the digital MCU 100, the addressable latch 1 manipulates the crosspoint array 2 and the shunt select array 3 by sequentially coupling pairs of line input ports until a CO dialtone is sensed by the digital MCU 100 in the receive channel. This information is then latched for further analysis by the digital MCU 100.**

('249 patent application, page 13, lines 10-27) (emphasis added). The specification further reads:

The digital MCU 100 will begin manipulating the crosspoint switch array by sequentially coupling pairs of the transmit output ports starting with the most probable pairs defined in the system algorithms. A description, which illustrates the system's switching algorithms, is shown in detail in Figures 4 and 5. The 1 KHz transmit calibration signal is therefore applied to the telephone base unit via the jack lines 202 until the 1 KHz is sensed by the digital MCU 100 at the receive level reference output RX LEVEL REF. When the digital MCU 100 senses the 1 KHz signal it will have successfully located the appropriate transmit lines and will latch the information and begin the transmit output step attenuator TX-5 adjustment.

('249 patent application, page 17, lines 5-14). The '249 patent application further states:

A block diagram of the 4x4 crosspoint switch array 2 and the 100 ohm shunt resistor array 3 is illustrated in Figure 9. The crosspoint switch array consists of a 4x4 matrix of analog switches designed to connect lines 1-4 of the 4 wire phone port 202 to the two transmit and two receive channels in any order and polarity. It is under the control of the digital MCU 100, through the bit addressable latch 1, that the appropriate transmit and receive lines are determined, as described above.

('249 patent application, page 18, lines 20-25) The above descriptions confirm that a digital MCU ("control logic"), coupled to a switch array ("switch matrix"), automatically determines

which of the plurality of receive or transmit lines ("signal lines") from the handset port interface comprise the receive path, determines an appropriate switch configuration from among a plurality of switch configurations based upon which of the plurality of lines from the handset port interface comprise the receive path, and sets the switch array ("switch matrix") to the appropriate switch configuration, the appropriate switch configuration coupling the handset port receive path to a headset receive path or other accessory configured to work with the base unit.

The Examiner was incorrect in reading further limitations into Claim 41 based on the specification of U.S. Patent No. 5,729,603. The Examiner claimed that U.S. Patent No. 5,729,603 discloses that "each of the six configurations is tested with a test signal, typically a dial tone and the result is measured via the signal level detector to determine the preferred configuration. Each of the six combinations are tested sequentially and the result is compared to the previous result and the best result is used as the combination." (Office Action mailed March 10, 2004, page 3). However, these further limitations found in the specification of U.S. Patent No. 5,729,603 should not be read into Claim 41 or any other claim on appeal. Instead, the Examiner should have limited his review to the claim limitation found in Claim 41 and to the '249 patent application to determine if one skilled in the art would have recognized that the inventor of the '249 patent application had possession at the time of the claimed subject matter, rather than looking at the disclosure of U.S. Patent No. 5,729,603. There was no express intent to impart a novel meaning to the terms of this claim limitation, and thus the ordinary meaning of the terms must be used. Furthermore, there is no ambiguity found in the claim limitation to warrant a review of the specification of U.S. Patent No. 5,729,603.

Finally, the Examiner was incorrect in his assertion that '249 patent application must disclose a testing process of six switch configurations. (Office Action mailed March 10, 2004, page 3) As previously described in the last section, a "plurality of switch configurations" means "more than one switch configuration" and should not be limited to six configurations, as the Examiner suggests in his Office Action mailed March 10, 2004 (pages 2-3). Instead, the correct

analysis is whether the specification '249 patent application fully supports the claim limitation in dispute found in Claim 41. Appellant submits that based on the descriptions noted above and based on the ordinary meaning found in the terms, one of ordinary skill in the art would recognize that the appellant had possession of the claim limitation, "...a control logic, coupled to the switch matrix, that automatically determines which of the plurality of signal lines from the handset port comprise the handset port receive path, determines a preferred switch configuration from among a plurality of switch configurations based upon which of the plurality of signal lines from the handset port comprise the handset port receive path, and sets the switch matrix to the preferred switch configuration, the preferred switch configuration coupling the handset port receive path to the headset receive path" in Claim 41.

Since Claim 41 is fully supported and described in the specification, it overcomes the § 112, first paragraph rejection. Therefore, the limitations found in Claims 56, 57, and 63, which disclose the same limitations as in Claim 41, are also fully supported and overcome the § 112, first paragraph rejection. Appellant respectfully submits that all claims on appeal (claims 41-58 and 63) are allowable.

2. Examiner improperly rejected claims that were previously allowed by a different examiner three years prior in this case that has been pending for five years.

The present application is a continuation application that was filed on April 5, 1999. In his Office Action mailed March 10, 2004, Examiner Harold improperly rejected the claims on appeal, the same claims that were noted as allowable by Examiner Saint-Surin in an Office Action mailed November 8, 1999. In his November 8, 1999 Office Action, Examiner Saint-Surin allowed all claims but suspended *ex parte* prosecution due to a potential interference for a period of 6 months from the date of the Office Action. As noted in MPEP 706.04, **great care**

should be exercised in authorizing a rejection of previously allowed claims (emphasis added). Great care was not exercised in this case; in fact, no rationale or explanation was given by Examiner Harold in his Office Action mailed April 11, 2003 nor in his final Office Action mailed March 10, 2004, for declaring new grounds of rejections of the previously allowed claims.

Furthermore, Examiner Saint-Surin's previous action of allowing the claims should have been given full faith and credit. See MPEP 706.04 PREVIOUS ACTION BY DIFFERENT EXAMINER ("Full faith and credit should be given to the search and action of a previous examiner **unless there is a clear error in the previous action** or knowledge of other prior art.") (emphasis added). Examiner Harold provided no indication as to what "clear error" was made by Examiner Saint-Surin, that would allow Examiner Harold to deter from giving full faith and credit to Examiner Saint-Surin's previous action of allowing the claims in the Office Action issued November 8, 1999.

It is unusual to reject a previously allowed claim. MPEP 706.04. It is even more unusual given the file history of the present application. **The present application has been pending for over five years.** In an Office Action dated mailed July 20, 1999, Examiner Saint-Surin had initially rejected claims 41-58 and 63 on the basis that the appellant had failed to apply each limitation or element of each of the copied claims to the disclosure of the specification, as set forth in 37 C.F.R. § 2.607(a)(5). Appellant responded to the Office Action in August 20, 1999, detailing the support for each limitation or element in Claims 41-58 and 63. As a result, Examiner Saint-Surin allowed Claims 41-58 and 63, but suspended *ex parte* prosecution as noted above. (Office Action mailed November 9, 1999, page 2). Thus, it is evident that Examiner Saint-Surin had reviewed the support for each of the claims on appeal (Claims 41-58 and 63), and following appellant's response, Examiner Saint-Surin was satisfied that the copied claims had support in the appellant's specification.

Despite the fact that Examiner Saint-Surin had already considered whether the appellant's

specification had support for the copied claims, Examiner Harold took the unusual measure of taking a new approach (i.e. rejecting the claims under § 112, first paragraph), without (1) giving full faith and credit to Examiner Saint-Surin's previous allowance of the claims and (2) without providing an explanation of what "clear error" he viewed in Examiner Saint-Surin's previous action of allowing the claims. Appellant respectfully submits to the Board that Examiner Harold erred in rejecting the claims on appeal which had been previously allowed by Examiner Saint-Surin, in light of MPEP 704.06 and in view of the prior prosecution history of the present application.

**IX. APPENDIX**

**A. CLAIMS ON APPEAL**

The claims on appeal are as follows:

1     41.     A self-configuring telephone interface unit, comprising:  
2             a switch matrix, settable to any of a plurality of switch configurations, each switch  
3                 configuration coupling a plurality of signal lines from a handset port of a  
4                 telephone to a plurality of signal lines from a headset, the plurality of signal lines  
5                 from the handset port including a handset port receive path, the plurality of signal  
6                 lines from the handset including a headset receive path; and a control logic,  
7                 coupled to the switch matrix, that automatically determines which of the plurality  
8                 of signal lines from the handset port comprise the handset port receive path,  
9                 determines a preferred switch configuration from among a plurality of switch  
10                configurations based upon which of the plurality of signal lines from the handset  
11                port comprise the handset port receive path, and sets the switch matrix to the  
12                preferred switch configuration, the preferred switch configuration coupling the  
13                handset port receive path to the headset receive path.

1     42.     The interface unit of claim 41 wherein:  
2             the switch matrix comprises a plurality of switches, each of the plurality of switches  
3                 coupling one handset port signal line with one headset signal line;  
4             each switch configuration in the plurality of switch configurations comprises a  
5                 predetermined setting for each of the plurality of switches; and,  
6             the control logic sets the switch matrix to a switch configuration by setting the plurality of  
7                 switches to the predetermined setting for the switch configuration.

1     43. The interface unit of claim 42 wherein:

2             each of the plurality of switches comprises a FET switch; and

3             the control logic comprises an FET gate driver that sets the FET switches.

1     44. The interface unit of claim 41 wherein:

2             the switch matrix comprises a plurality of relays, the plurality of relays coupling the

3                 plurality of handset port signal lines to the plurality of headset signal lines;

4             each switch configuration in the plurality of switch configurations comprises a

5                 predetermined setting for each of the plurality of relays; and,

6             the control logic sets the switch matrix to a switch configuration by setting the plurality of

7                 relays to the predetermined setting for the switch configuration.

1     45. The interface unit of claim 41 wherein:

2             the switch matrix is based on a cascading architecture.

1     46. The interface unit of claim 41 further comprising:

2             a signal level detector that generates an output signal, the output signal indicating a level

3                 of an input signal to the signal level detector; a detector switch matrix, settable to

4                 any of a plurality of detector switch configurations, each detector switch

5                 configuration coupling the signal level detector input to signal lines from among

6                 the plurality of signal lines from the handset port; the control logic further for

7                 setting the detector switch matrix to a first detector switch configuration from

8                 among the plurality of detector switch configurations; for receiving a first output

9                 signal from the signal level detector, the first output signal generated in response

10                to a test signal received by the handset port receive path; and for determining,

11                based on the first output signal from the signal level detector, whether the signal

12 lines coupled by the first detector switch configuration comprise the handset port  
13 receive path.

1 47. The interface unit of claim 46 wherein:  
2 the test signal comprises a dial tone.

1 48. The interface unit of claim 46 wherein the signal level detector comprises:  
2 an AC voltage detector which receives the input signal to the signal level detector; and,  
3 an A/D converter coupled to the AC voltage detector, the A/D converter generating the  
4 output signal of the signal level detector.

1 49. The interface unit of claim 46 further comprising:  
2 a variable gain circuit for modifying an amplitude of a signal transmitted on a headset  
3 transmit path;  
4 the plurality of signal lines from the handset port further including a handset port transmit  
5 path; and  
6 a control logic further for alternately coupling the headset transmit path and a handset  
7 transmit path to the handset port transmit path; for setting the detector switch  
8 matrix to a detector switch configuration which couples the handset port transmit  
9 path to the signal level detector input; for receiving second and third output  
10 signals from the signal level detector, the second output signal generated in  
11 response to an audio test signal transmitted by the handset transmit path, the third  
12 output signal generated in response to the audio test signal transmitted by the  
13 headset transmit path; and for adjusting a gain of the variable gain circuit in  
14 response to the second and third output signals until a gain of the headset transmit  
15 path is substantially equal to a gain of the handset transmit path.



1     50. The interface unit of claim 41 wherein:

2             the interface unit further comprises a variable gain circuit for modifying an amplitude of a  
3             signal transmitted on a headset transmit path; and, the control logic further  
4             automatically adjusts a gain of the variable gain circuit until a gain of the headset  
5             transmit path is substantially equal to a gain of a handset transmit path.

1     51. A self-configuring telephone interface unit, comprising:

2             a switch matrix, settable to any of a plurality of switch configurations, each switch  
3             configuration coupling a plurality of signal lines from a handset port of a  
4             telephone to a plurality of signal lines from a headset, the plurality of signal lines  
5             from the handset port including a handset port receive path, the plurality of signal  
6             lines from the handset including a headset receive path; a variable gain circuit for  
7             modifying an amplitude of a signal transmitted on a headset transmit path  
8             switchably coupled to a handset port transmit path; a handset transmit path  
9             switchably coupled to the handset port transmit path; and a control logic, coupled  
10            to the switch matrix, that automatically sets the switch matrix to a preferred  
11            switch configuration from among the plurality of switch configurations, the  
12            preferred switch configuration coupling the handset port receive path to the  
13            headset receive path; and the control logic couples the handset port transmit path  
14            alternately to the headset transmit path and to the handset transmit path; receives a  
15            first gain signal and a second gain signal from the handset port transmit path; and  
16            adjusts the gain of the variable gain circuit in response to the first and second gain  
17            signals, the first gain signal generated by an audio test signal transmitted by the  
18            handset transmit path, the second gain signal generated by the audio test signal  
19            transmitted by the headset transmit path.

1     52. The interface unit of claim 51 further comprising:

2             a handset switch for switchably coupling the handset transmit path to the handset port  
3             transmit path;

4             the plurality of signal lines from the handset port further including the handset port  
5             transmit path; and

6             the control logic further for switchably coupling the handset transmit path to the handset  
7             port transmit path by setting the handset switch.

1     53. The interface unit of claim 52 wherein:

2             the handset switch comprises a FET switch; and,

3             the control logic comprises a FET gate driver for gating the FET switch.

1     54. The interface unit of claim 51 wherein:

2             the plurality of signal lines from the handset port further includes the handset port  
3             transmit path;

4             the plurality of signal lines from the headset further includes the headset transmit path;  
5             and

6             the control logic further switchably couples the headset transmit path to the handset port  
7             transmit path by setting the switch matrix.

1     55. The interface unit of claim 51 further comprising:

2             a signal generator for generating a signal on the headset receive path, the signal indicating  
3             that the audio test signal may be transmitted.

1     56. A self-configuring headset and telephone interface unit, comprising:

2 a headset; a switch matrix, settable to any of a plurality of switch configurations, each  
3 switch configuration coupling a plurality of signal lines from a handset port of a  
4 telephone to a plurality of signal lines from a headset, the plurality of signal lines  
5 from the handset port including a handset port receive path, the plurality of signal  
6 lines from the headset including a headset receive path; and, a control logic,  
7 coupled to the switch matrix, that automatically determines which of the plurality  
8 of signal lines from the handset port comprise the handset port receive path,  
9 determines a preferred switch configuration from among the plurality of switch  
10 configurations based on which of the plurality of signal lines from the handset  
11 port comprise the handset port receive path, and sets the switch matrix to the  
12 preferred switch configuration, the preferred switch configuration coupling the  
13 handset port receive path to the headset receive path.

1 57. In a telephone interface unit comprising a switch matrix settable to any of a plurality of  
2 switch configurations, a method for automatically configuring the telephone interface unit  
3 comprising:

4 receiving a test signal on a handset port receive path; setting the switch matrix to each of  
5 at least two switch configurations; for each of the at least two switch  
6 configurations, measuring a signal on the headset receive path resulting from the  
7 test signal; and automatically setting the switch matrix to a preferred switch  
8 configuration from among the at least two switch configurations, the preferred  
9 switch configuration corresponding to the signal on the headset receive path with  
10 either a minimum or a maximum value.

1 58. The method of claim 57 wherein:

2 measuring the signal on the headset receive path comprises measuring a signal level of

3           the signal; and the preferred switch configuration corresponds to the signal on the  
4           headset receive signal path with a maximum signal level.

1   63. In a telephone interface unit comprising a switch matrix settable to any of a plurality of  
2   switch configurations for interfacing a handset port of a telephone to a headset, the handset port  
3   coupled to the interface unit by a handset port receive path and a handset port transmit path, the  
4   headset coupled to the interface unit by headset receive path and a headset transmit path, a  
5   method for automatically configuring the interface unit comprising:

6           receiving a test signal on a handset port receive path; setting the switch matrix to each of  
7           at least two switch configurations; for each of the at least two switch  
8           configurations, measuring a signal on the headset receive path resulting from the  
9           test signal; automatically setting the switch matrix to a preferred switch  
10          configuration from the among the at least two switch configurations, the preferred  
11          switch configuration corresponding to the signal on the headset receive path with  
12          either a minimum or a maximum value; and automatically adjusting a gain of the  
13          headset transmit path to match a gain of the handset port transmit path.

**B. PATENT CITED IN APPELLANT'S BRIEF**

The following document is attached for the Board's convenience:

- U.S. Patent Serial No. 5,729,603 to Huddart *et al.*

**CONCLUSION**

In view of the foregoing, Appellant submits that all rejections of claims 41-58 and 63 are unfounded and should be reversed.

Respectfully submitted,

HAVERSTOCK & OWENS LLP

Dated: 7-9-04

By: 

Thomas B. Haverstock

Reg. No.: 32,571

Attorneys for Appellant/Applicant

**CERTIFICATE OF MAILING (37 CFR § 1.8(a))**

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the U.S. Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to the: Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450

HAVERSTOCK & OWENS LLP.

Date: 7/9/04 By: 